

## ULTRASOUND ASSEMBLY WITH INCREASED EFFICACY

### ABSTRACT

A catheter system is disclosed. The catheter system includes a catheter body having an external surface and an ultrasound transducer having a side between a first end and a second end. A first medium is positioned adjacent to the first end of the ultrasound transducer and a second medium is positioned adjacent to the external side of the ultrasound transducer. The second medium is harder than the first medium to encourage flexibility of the catheter body adjacent to the first end of the ultrasound transducer and efficient transmission of ultrasound energy from the external side of the ultrasound transducer.